

8th Meeting of the European Association of Vertebrate Palaeontologists



Aix-en-Provence

June 7th-12th, 2010

Abstract Volume

Poster presentation

New fossil sites with mammal footprints in the Oligocene of south-eastern France

Loïc Costeur¹, Christine Balme², Stéphane Legal², Olivier Maridet³

¹Naturhistorisches Museum Basel, Augustinergasse 2, 4001 Basel, Switzerland.

²Parc Naturel Régional du Luberon, Maison du Parc, BP122, 60 place Jean-Jaurès 84404 Apt Cedex, France.

³Key Laboratory of Evolutionary Systematics of Vertebrates, Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences Beijing 100044, P.R. China

The early Oligocene sedimentary record of south-eastern France already yielded 3 sites with mammal footprints (Demathieu et al., 1984; Costeur et al., 2009). New excavations on one of them and new discoveries enrich the fossil record of footprints in the area of the Parc Naturel Régional du Luberon (Vaucluse). New odd-toed ungulate trackways were found and are here described together with several new sites showing various records, from one footprint to several long trackways ascribed to even-toed and odd-toed ungulates. In the last few years, the track-record in the “Parc du Luberon” largely increased to reach about ten sites spread in the early Oligocene calcareous lacustrine sediments. Such track levels indicate emersion episodes in the complex history of the Apt-Manosque-Forcalquier basin that formed a large lake during the whole Oligocene (Lesueur, 1991). They also testify to the presence of mammal faunas at a period when no or very few bone remains are known, they bridge the existing gap between the late Eocene faunas (e.g., La Debruge) and the middle Oligocene records (e.g., Murs or Aubenas-les Alpes). Fieldwork is currently developed to locate early Oligocene mammal bone remains.

References:

- Costeur L., Balme C. & Legal S. (2009). Early Oligocene mammal tracks from south-eastern France. *Ichnos*, 16 (4): 257-267.
- Demathieu, G., Ginsburg, L., Guérin, C. and Truc, G. 1984. Etude paléontologique, ichnologique et paléoécologique du gisement oligocène de Saignon (bassin d'Apt, Vaucluse). *Bulletin du Museum national d'Histoire naturel de Paris* 6, 4e série, section C (2): 153-183.
- Lesueur, J.L. 1991. Etude sédimentologique et stratigraphique du bassin paléogène d'Apt-Manosque-Forcalquier (Alpes de Haute Provence). Modalités de la Transgression burdigalienne. *Unpublished Ph.D. Thesis, University Bordeaux* 3. 424 p.